# **ECS Maintenance and Development Project**

# **Transition Plan for the EMD Project**

August 2003

Raytheon Company Upper Marlboro, Maryland

# **Transition Plan for the EMD Project**

#### August 2003

Prepared Under Contract NAS5-03098 CDRL Item #001

#### **RESPONSIBLE AUTHOR**

| Charles W. Thomas /s/                   | 8/15/03 |
|---|---------|
| Charles W. Thomas                       | Date    |
| ECS Maintenance and Development Project |         |

#### **RESPONSIBLE OFFICE**

| Mary S. Armstrong /s/                   | 8/15/03 |
|---|---------|
| Mary S. Armstrong                       | Date    |
| Deputy Program Manager                  |         |
| ECS Maintenance and Development Project |         |

**Raytheon Company** Upper Marlboro, Maryland

## **Preface**

This document is a formal contract deliverable. It requires Government review and approval within 10 business days. Changes to this document will be made by document change notice (DCN) or by complete revision.

Any questions should be addressed to:

Data Management Office The EMD Project Office Raytheon Company 1616 McCormick Drive Upper Marlboro, Maryland 20774-5301

## **Revision History**

| Document Number Status/Issue |          | Publication Date | CCR Number |
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iii 101-EMD-001

iv

## **Abstract**

The Transition Plan (TP) documents all the activities necessary to transfer maintenance and development responsibilities from the ECS contract to the EMD contract. The Raytheon team will use an enhanced transition approach to minimize transition cost and time. This transition will also include activities necessary to transition the Verification Database (VDB) to the EMD contract.

This plan documents the technical requirements, responsibilities, management, resources, milestones, progress reporting, metrics, interfaces, subcontracts and license agreements, equipment, tools, documentation, testing, training, and facilities to be used during the transition. The plan will describe any external dependencies and needs including government furnished material or services.

Keywords: transition, ECS, EMD, contractor, schedule, SDPS, maintenance, Raytheon

v 101-EMD-001

## **Contents**

#### **Preface**

#### **Abstract**

#### 1. Introduction

|     | ii iiidoddolloll      |     |
|-----|-----------------------|-----|
| 1.1 | Identification        | 1-1 |
| 1.2 | Scope                 | 1-1 |
| 1.3 | Purpose               | 1-1 |
| 1.4 | Status and Schedule   | 1-1 |
| 1.5 | Organization          | 1-2 |
|     | 2. Related Documentat | ion |
| 2.1 | Parent Documents      | 2-1 |
|     | 3. Requirements       |     |
|     | 4. Management         |     |
|     | 5. Resources          |     |
|     | 6. Milestones         |     |

7. Progress Reporting and Metrics

vii 101-EMD-001

## 8. Interfaces

#### 9. Subcontracts

## 10. License Agreements

|  | 11. Property                          |  |  |  |
|--|---------------------------------------|--|--|--|
| 11.1                                       | Property Transition                   |  |  |  |
| 11.2                                       | Hardware Maintenance 11-1             |  |  |  |
|  | 12. Documentation                     |  |  |  |
| 13. Equipment, Tools, Testing and Training |                                       |  |  |  |
|  | 14. Facilities                        |  |  |  |
|  | List of Figures                       |  |  |  |
| 4-1  | EMD Organizational Chart 4-2          |  |  |  |
|  | List of Tables                        |  |  |  |
| 6-1  | Transition Activities/ Milestones 6-1 |  |  |  |

#### 1. Introduction

This document specifies the activities required to transition sustaining engineering of the Earth Observing System Data and Information System (EOSDIS) Core System Science Data Processing System (SDPS) from contract NAS5-60000 to contract NAS5-03098. Since Raytheon is the prime contractor for both contracts, a simplified transition is planned.

#### 1.1 Identification

The ECS to EMD Transition Plan document, Contract Data Requirement List (CDRL) Item Number 001, whose requirements are specified in Data Item Description EMD-TP-1, is a required deliverable under the EMD Task 101 developed under GSFC Contract NAS5-03098.

#### 1.2 Scope

This document describes the tasks needed to transition from the ECS Extension contract to the EMD Contract, Task 101, ECS SDPS Maintenance. Since the Raytheon contractor is the prime contractor on both contracts, this transition will be very minimal.

#### 1.3 Purpose

The Transition Plan (TP) documents all the activities necessary to transfer maintenance and development responsibilities from the ECS contract to the EMD contract. The Raytheon team will use an enhanced transition approach to minimize transition cost and time. This transition will also include activities necessary to transition the Verification Database (VDB) to the EMD contract. The VDB transition activities will be performed under ESD 199 of the ECS contract.

This plan documents the technical requirements, responsibilities, management, resources, milestones, progress reporting, metrics, interfaces, subcontracts and license agreements, equipment, tools, documentation, testing, training, and facilities to be used during the transition. The plan will describe any external dependencies and needs including government furnished material or services.

#### 1.4 Status and Schedule

This document is scheduled for delivery to ESDIS two weeks after contract award. The Transition Plan shall be maintained throughout the transition period, and retired thereafter. Since the Raytheon transition period is expected to last only two months, no updates to this document are expected.

#### 1.5 Organization

The contents subsequent to this first section are presented as follows:

- Section 2 **Related Documentation.** Lists documents that drive, support or expand on the material in this document.
- Section 3 **Requirements.** Identifies the requirements and responsibilities of the EMD contractor during the transition phase to the EMD contract, Task 101.
- Section 4 **Management.** Identifies the management activities of the EMD contractor during the transition phase to the EMD contract, Task 101.
- Section 5 **Resources.** Identifies how resources needed for the EMD contract, task 101 will be obtained during the transition period.
- Section 6 **Milestones.** Identifies the schedule and milestones that will occur during the transition period for the EMD contract, Task 101.
- Section 7 **Progress Reporting and Metrics.** Identifies how progress and metrics will be reported during the transition phase to the EMD contract, Task 101.
- Section 8 **Interfaces.** Identifies the interfaces needed for transition during the transition period to EMD contract, Task 101.
- Section 9 **Subcontracts.** Identifies the subcontracts that will be put in place during the transition phase to the EMD contract, Task 101.
- Section 10 **License Agreements.** Identifies the activities needed to transition license agreements from the ECS extension contract to the EMD contract, Task 101.
- Section 11 **Property.** Discusses property transition and hardware maintenance.
- Section 12 **Documentation.** Identifies the documentation that will be referenced during the transition to the EMD contract, Task 101.
- Section 13 **Equipment, Tools, Testing and Training.** Identifies any equipment, tools, testing, and/or training that will be required in order to transition responsibility of the ECS system to the EMD contract, Task 101.
- Section 14 **Facilities.** Identifies the activities needed to transition to the facilities of the EMD contractor.

1-2 101-EMD-001

## 2. Related Documentation

#### 2.1 Parent Documents

The parent document is the document from which EMD Transition Plan scope and content are derived.

Contract Data Requirements Document For EMD Task 101 ECS SDPS Maintenance

EMD Task 101 Statement of Work For ECS SDPS Maintenance

2-1 101-EMD-001

## 3. Requirements

The EMD contractor will assume all technical sustaining engineering activities as specified in the Task 101 Statement of Work on day 1 of the contract, August 1, 2003. A summary of these requirements is described below.

The EMD contractor must be able to plan and manage the concurrent development and deployment of a number of fixes, minor enhancements, and COTS upgrades in a way that minimizes the impact on the DAAC and Instrument Team resources and schedules while optimizing use of its own development and test resources.

The EMD contractor must provide 24x7 support and have the management and engineering processes in place to effectively communicate and prioritize work generated from each DAAC to ensure that overall mission milestones are met and sustaining engineering resources are effectively utilized.

The EMD contractor must maintain 1.1 million lines of C++ custom code, 155 thousand lines of Java custom code and a small amount of C and Fortran custom code that are contained in more than 15 thousand modules.

The EMD contractor must maintain 148 COTS software and firmware products, including over 50 products in the SDPS operational configuration.

The EMD contractor must maintain over 50 thousand lines of database schema definitions and SQL stored procedures.

The EMD contractor must transition and maintain the Verification Data Base (VDB).

# 4. Management

The EMD contractor will have an organization and management structure in place on August 1, 2003 to assume all roles and responsibilities as specified in the Task 101 Statement of Work. Figure 4-1 shows the organization structure for the EMD contract.

# Information Technology Solutions EMD Program

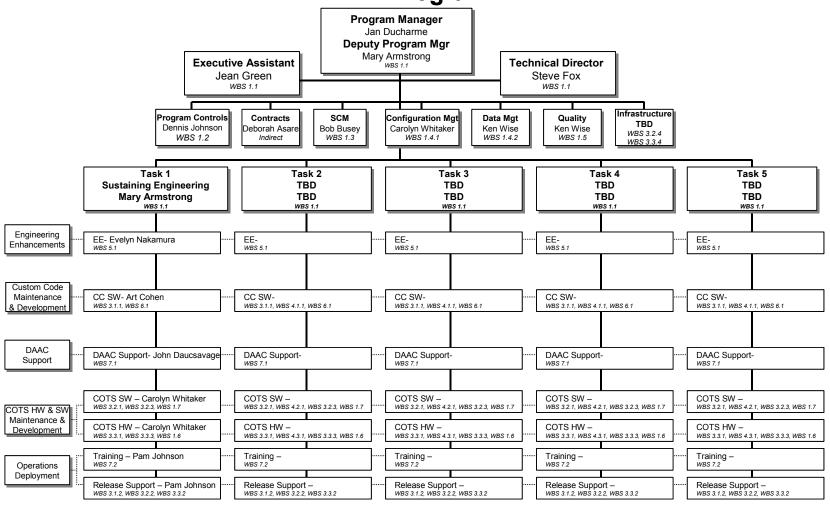


Figure 4-1. EMD Organizational Chart

4-2 101-EMD-001

## 5. Resources

The resources to support Task 101 will transition directly from the ECS contract. Some staff will be re-badged to Raytheon small-business subcontractors in order to achieve NASA's small business goals for the EMD contract.

5-1 101-EMD-001

## 6. Milestones

Table 6-1 shows the activities/milestones that will be performed during the EMD enhanced transition period.

Table 6-1. Transition Activities/Milestones

| Activity                         | Completion<br>Date | Comment   |
|----------------------------------|--------------------|---|
| EMD<br>Sustaining<br>Engineering | 8/1/03             | EMD technical sustaining engineering starts on day 1 of EMD.  |
| Subcontractor<br>Training        | 8/1/03             | No additional training will be needed since subcontractors will use re-badged ECS personnel.  |
| Accept SDPS                      | 8/1/03             | This activity will simply be recorded as a milestone.   |
| Re-baseline<br>NCRs              | 9/1/03             | The effort does not change, but the schedule is brought forward because of the shortened property transfer activities.  |
| Transfer<br>Property             | 9/15/03            | Validate inventory that was performed during ECS transition.  |
|                                  |                    | When initial GFE list is received from NASA, update property database for items identified above with EMD contract number.  |
| Detailed<br>Planning             | 9/28/03            | EMD organization will be in place on day 1. Detailed planning will require 8 weeks to put in place.   |
| VDB<br>Transition                | 9/30/03            | Transition of the VDB to the ECS contract.  15 August: QSS PC files transferred to EMD server  29 August: Management Training Completed  29 August: Data Entry Training Completed  10 September: QSS Hardcopy files transferred to Raytheon  17 September: QSS delivers final documents: (1) process and procedures, (2) user manual  17 September: SW tools and licenses transferred |

6-1 101-EMD-001

## 7. Progress Reporting and Metrics

Progress reporting and metrics related to transition activities will be reported at Daily Status Review (DSR) meetings which are attended by the Government and the Raytheon Team. The primary metric to be used during this brief transition period is schedule status versus plan.

7-1 101-EMD-001

# 8. Interfaces

There are no external interfaces required to complete this transition.

#### 9. Subcontracts

The EMD contractor plans to issue the subcontractors listed below, other than Acquisition Technologies, Inc. ("ATI"), letter subcontracts, with a specified funding limit, to authorize them to proceed with the performance of work on Task Order 101 pending the negotiation of definitive subcontracts by the end of September 2003.

The EMD contractor plans to execute a definitive subcontract with ATI prior to its commencement of work on the task order.

#### **List of EMD Task 101 Subcontractors:**

- Acquisition Technologies, Inc.
- COMSO, Inc.
- EER Systems, Inc.
- Electronic Data Systems Corporation
- Earth Resources Technology, Inc.
- SGT, Inc.
- Science Systems and Applications, Inc.

## 10. License Agreements

Since Raytheon is the incumbent contractor there will be no need to transfer software licenses or maintenance to the EMD contractor. All ECS software licenses and maintenance agreements will be absorbed by EMD. The software license and maintenance agreements expire on 31 December 2003.

## 11. Property

#### 11.1 Property Transition

Since Raytheon is the incumbent contractor there is no need to transition property to the EMD contractor. However, the ECS hardware and the EDF and DAACs will become GFE under the EMD contract. Raytheon will provide a list of property to NASA with the DD-250 at contract closeout. This list will become the initial GFE list for the EMD contractor. When NASA accepts the DD-250 and the EMD contract is modified, with the updated property list the EMD contractor will update the property database to reflect the EMD contract number (NAS5-03098) for EMD items in the property database.

#### 11.2 Hardware Maintenance

Since Raytheon is the incumbent contractor there is no need to transfer hardware maintenance agreements to the EMD contractor. All ECS hardware maintenance agreements will be absorbed by EMD. The hardware maintenance agreements expire on 31 December 2003.

## 12. Documentation

No additional documentation other then this plan will be required to transition ECS to EMD. The following table list CDRLs as specified in the Task 101 SOW that will be generated as part of execution of Task 101.

**Table 12-1. EMD CDRL List (1 of 2)** 

| Item | DID#        | Title  | Hardcopy<br>Quantity | Schedule                          | Government<br>Review &<br>Approval |
|------|-------------|--|----------------------|-----------------------------------|------------------------------------|
| 001  | EMD-TP-1    | Transition Plan                                    | 10                   | 2 weeks after task authorization  | 10 business<br>days                |
| 002  | EMD-SMDP-2  | Software Maintenance and Development Plan          | 10                   | 3 months after task authorization | 20 business days                   |
| 003  | EMD-HMDP-3  | Hardware Maintenance and Development Plan          | 10                   | 3 months after task authorization | 20 business days                   |
| 004  | EMD-SQAP-4  | Software Quality<br>Assurance Plan                 | 10                   | 3 months after task authorization | 20 business days                   |
| 005  | EMD-PP-5    | Property Management<br>Plan                        | 10                   | 4 months after task authorization | 20 business days                   |
| 006  | EMD-RMP-6   | Risk Management Plan                               | 10                   | 4 months after task authorization | 20 business days                   |
| 007  | EMD-SMP-7   | EMD Security<br>Management Plan                    | 10                   | 3 months after task authorization | 20 business days                   |
| 800  | EMD-PMP-8   | Program Management<br>Plan                         | 10                   | 1 month after authorization       | 10 business days                   |
| 009  | Not used    | Not used   |                      |                                   |                                    |
| 010  | EMD-MPR-10  | Monthly Progress<br>Reports                        | 10                   | Monthly                           | Not applicable                     |
| 011  | EMD-533-11  | Contractor Cost<br>Reporting – 533<br>Requirements | 10                   | Monthly                           | Not applicable                     |
| 012  | EMD-MCMR-12 | Monthly Contractor<br>Manpower Reporting           | 10                   | Monthly                           | Not applicable                     |

Table 12-1. EMD CDRL List (2 of 2)

| Item | DID#       | Title  | Hardcopy<br>Quantity   | Schedule  | Government<br>Review &<br>Approval  |
|------|------------|--|--|---|---|
| 013  | EMD-CSR-13 | Consent to Ship Review Package                   | 10   | Within 30 days of the review  | 20 business days  |
| 014  | EMD-PSR-14 | Pre-ship Review Package                          | 10   | Within 30 days of the review  | 20 business days  |
| 015  | EMD-LRR-15 | Lessons Learned Review Package                   | 10   | Within 30 days of the review  | 20 business days  |
| 016  | EMD-RSR-16 | Release Status Review Package                    | 10   | Within 30 days of the review  | 20 business days  |
| 017  | EMD-PM-17  | Procurement<br>Management Plan                   | 10   | 3 months after task authorization   | 20 business days  |
| 018  | EMD-SEP-18 | System Enhancement<br>Proposals                  | 10   | As required; no<br>less than once<br>per year on task<br>anniversary date | Variable  |
| 019  | EMD-CMP-19 | Configuration<br>Management Plan                 | 10   | 3 months after task authorization   | 20 business days  |
| 020  | EMD-MPP-20 | Monthly Patch Plan                               | Electronic<br>access<br>plus 10<br>copies<br>upon<br>request | Monthly plus weekly updates   | 5 business days<br>for monthly<br>1 business day<br>for weekly<br>updates |
| 21   | EMD-IRR-21 | Incremental Release<br>Review Package            | 10   | Within 30 days of the review  | 20 business days  |
| 22   | EMD-CDT-22 | Capability Demonstration Test Plan and Procedure | 10   | 30 days prior to test   | 10 business days  |
| 23   | EMD-EDP-23 | ECS SDPS<br>Documentation Package                | 10   | With each<br>maintenance<br>release                                       | 20 business<br>days   |

# 13. Equipment, Tools, Testing and Training

No additional equipment, tools, testing or training will be required in order to transition from the ECS contract to the EMD contract.

13-1 101-EMD-001

## 14. Facilities

The Raytheon Team will use the Raytheon Landover facility and the Government furnished facilities and equipment (as identified in the RFP) to perform the Task 1 SDPS maintenance and development activities. No other facilities or equipment are required.